NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
F A C T S H E E T
(pursuant to NAC 445A.236)

Permittee Name: Clark County Parks and Recreation
2601 E. Sunset Road
Las Vegas, Nevada 89120

Permit Number: NEV2003504

Location: Clark County Wetlands Park Nature Preserve
7050 E. Tropicana Avenue
Las Vegas, Clark County, Nevada 89122

Latitude: 36◦ 06'N.; Longitude: 115◦ 00'W.
Section 23, T. 21S., R. 62E. MDB&M

Characteristics: The Clark County Wetlands Park Nature Preserve (Preserve) is approximately a 130 acre facility composed of open water ponds, connecting waterways, irrigated wetlands with both emergent vegetation, riparian scrub, wet meadow species and upland areas with woody species/shrubs/trees. The Preserve will be supplied with reuse water delivered via a 24" pipeline from the Clark County Water Reclamation Facility (CCWRF) to the lined riprap mixing basin at the north end of the Preserve where it is blended with channel flows directed into the basin from the Monson stormwater channel which borders the Preserve on the North. All water management/wetland enhancement activities and irrigation reuse will be conducted in accordance with the approved Water Monitoring & Management Plan (WM&MP) and the terms and conditions of the permit.

Flow: The applicant has applied for a 5.00 MGD Daily Maximum Flow to supplement water management and irrigation demands. The permit requires 1.) the reuse water quantity to be monitored and reported; 2.) the fecal coliform and nutrient parameters be monitored by CCWRF and reported by the Permittee, and 3.) the blended water quality be monitored for TDS, fecal coliform, sulfates and nitrate as nitrogen and reported. The annual application volume is limited by agreement to 650 acre feet per year.

Effluent and Blended Water Quality Monitoring:

Fecal Coliform:

Fecal Coliform:* 2.2 CFU/MPN/100 ml 30 day average Cfu = Colony Forming 23 CFU/MPN/100 ml daily max.unit
MPN = Most Probable Number, Ml = Milliliter

* Sample results are obtained from CCWRF (# NV0021261)

TDS, Chlorides, nitrate as N, Sulfates:

Sampling of the blended water will be conducted at four sites in the Wetlands Park: NP-1 just south of the blending basin at the north end of the upper pond; NP-4 south of the second middle pond; NP-6 along one of the western channels that flows from the upper pond; and NP-8 at the southeastern end of the remnant D-14 pond. Currently, this monitoring is conducted under contract by UNLV monthly under a Bureau of Reclamation grant. This monitoring will be continued under the same contract and reported to NDEP.

General: CCWRF, formerly Clark County Sanitation District, will supply treated effluent via dedicated pipeline to the blending bay at Monson Channel. The reclaimed water meets Category C quality per NAC 445A.276, and is partly denitrified (average 15 mg/L N).

Wetland Enhancement:

A north to South, gravity flow through system, with various water-use scenarios, is proposed for the Nature Preserve with Monson Channel flows being supplemented by effluent supplied by CCWRF. The water management for the application and distribution system consists of a series of ponds and overflow channels within the Wetlands Park Nature Preserve (Preserve). Effluent is supplied via an 1,150 foot long 24" pipeline from a tee on the treatment plant outfall line, and controlled via a globe valve which will be controlled by the CCWRF. The effluent line is installed under the Monson Channel, discharging into the blending basin with a riprap dissipator, into which Monson water is also introduced via a flow control structure. The blended water enters the flow-through system via a gate control. The quantity of effluent introduced into the blending basin is controlled by the WPP when water quality or quantity parameters dictate the need for the addition of effluent. The amount of effluent entering the Nature Preserve will be adjusted for the wetland and wildlife needs based upon water quality monitoring as agreed to by the U.S. Fish and Wildlife Service.

Water quality and management are in accordance with consultation with interested agencies , as required by the Nature Preserve Environmental Assessment (BOR 1999). Nature Preserve staff informs the CCWRF plant operators whenever the canal gate controlling discharge effluent is adjusted. Effluent is not allowed to remain in the pipeline for more than two weeks. A mechanical flow meter is installed in line to measure effluent flow discharged into the WPP.
Water and or blended water is designed to flow south from the blending basin through a series of ponds or "stream" channels constructed through the WPP. Flow through the Preserve is managed by hand regulated adjustable weirs. The water first enters the North Pond where it can be distributed into three channels by adjustable weir boards. Flow from the southwest and south channels eventually reaches the lower pond system, while flow from the southeast channel feeds the middle three ponds. Water from these middle three ponds flows on south to the lower pond. The water level and retention time in these ponds are all managed via adjustable weir boards. The lower pond, constructed at the site of the old D-14 pond, collects water from the middle three ponds, the three channels and any contribution from the Tropicana Wash as well. This water irrigates the adjoining scrub wetlands. Shaping and grading features of the WPP are designed to contain all waters. Emergency overflow from lower pond emergency discharge riser resulting from a catastrophic event would discharge into the wetlands park area south of E. Tropicana Avenue and the WPP.

Irrigation:

Approximately .57 acres are irrigated with water supplied (pumped) from the lower pond. A drip irrigation system is utilized for individual plants and trees, and a sprinkler system is used to irrigate 1,200 square feet of bermuda grass at the park visitor center. Irrigation is on a timer system. Temporary watering systems are used during the hot summer months as vegetative needs require, especially for new plantings which are being established. Direct supplemental irrigation may be implemented on an as needed basis and allowed if Monson water quality is temporarily too poor to use due to storm activity or other impacts.

Receiving Water Characteristics: The receiving water is the shallow nuisance water aquifer. The goal of the use of treated effluent, blended with poorer quality Monson Channel water is to provide a reliable water supply to the WPP for the wetlands augmentation and maintenance, and for supplemental irrigation in the WPP. Water management for augmenting the wetlands and onsite irrigation should ensure the health, survival and stability of the wetlands system. The applicant, as specified in the Water Management and Monitoring Plan (WM&MP), must manage the blended water to ensure that the water is utilized on site in accordance with the WM&MP. The supplemental water use in the Wetlands Park is a beneficial use, and should have no adverse effects on the environment.

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to manage and utilize/discharge waters within the Preserve to groundwaters of the State of Nevada subject to the conditions contained within

the permit and WM&MP is being sent to the **Las Vegas Review Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing or by FAX or phone for a period of 30 days following the date of the publication of the public notice. All comments must be received by August 23, 2003. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination

The Division has made the tentative determination to issue the proposed permit for a period of five (5) years.

Schedule of Compliance and Special Conditions

The Permittee shall implement and comply with the provisions of the following schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the Schedule of Compliance.

a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.

b. The Permittee, shall submit a final WM&MP for review and approval. The WM&MP shall adequately address all comments and any deficiencies relating to the Division's review of the draft W&MMP prior to reuse. **The Permittee shall not reuse treated effluent prior to having an approved Final W&MMP per NAC 445A.275.**

c. The Permittee shall provide the Division with the documentation required in I.B.12. **prior to use of treated effluent per I.B.10..**

d. All compliance deliverables shall be submitted to Icyl Mulligan, NDEP, 333 West Nye Lane, Carson City, Nevada 89706.

Rationale for Permit Requirements

Required parameters are monitored to ensure effluent quality is maintained per NAC 445A.275, 445A.276 and groundwaters of the State are protected.

Prepared by: Icyl C. Mulligan
June 2003